

GEAR BOX FOR MOTOR VEHICLES

Abstract

Method and device for providing an increment shifted transmission (9) for motor vehicles including an in-going shaft in a housing. At least one intermediate shaft in the housing exhibits at least one gear wheel (16, 17) in engagement with a gear wheel (12, 15) on the in-going shaft. A main shaft in the housing has gear wheels (15, 21, 22, 23) and is in engagement with gear wheels (18, 19, 20) on the intermediate shaft. At least one of the gear wheels in each neutrally engaging pair of gear wheels on the intermediate shaft and the main shaft are rotatably arranged about the shaft and by coupling members (13, 24, 25) being lockable onto its shaft and maneuvering members (40, 41, 42) co-operating with the coupling members controlled by a control unit (45) depending on signals fed to the control unit representative of various engine and vehicle data. The maneuvering members (40, 41, 42) are arranged to, in the case of in-signals to the control unit (45) which indicate a predetermined driving condition at which the fuel consumption of the vehicle is optimally low, be set by means of the control unit (45) so that a synchronized gear engaged at the time is placed in neutral position, and in that the maneuvering members (40, 41, 42) are arranged to deactivate the neutral position when said driving condition is no longer present. By means of the invention, a gear box is obtained which permits a lowered fuel consumption of an associated engine.